

ABSTRACT

A microwave power amplifier comprising a drive amplifying stage includes power elements, gate and drain bias circuits of the power elements, a RC parallel circuit connected between input port and gates of said power elements, a shunt resistor connected between ground terminal and said gates of power elements, and a negative feedback circuit connected in series with resistors and capacitors and in parallel with the power elements. An interstage matching circuit is connected in series with the drive amplifying stage; and a power amplifying stage including power elements connected in parallel with a power divider and a power coupler, gate and drain bias circuits of said power elements, a RC parallel circuit connected between the gates of power elements and the interstage matching circuit, and a shunt resistor connected between a ground and the gates of power elements.